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AUTHOR Conti, Gary J.; Giles, Wayne E.
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ABSTRACT

This project, conducted by Spoon River College (Canton, Illinois), demonstrated the feasibility of a theoretical model developed by Wayne Giles and Gary Conti for training Comprehensive Employment and Training Act (CETA) clients. The model proposed the interfacing of long-term simultaneous training in academic skills, vocational skills, and self-awareness skills for CETA clients. This project actuated the model by providing 32 weeks of support training in developmental studies, welding, and human potential development to 20 CETA participants. The success of the project was measured by the gains in skills and knowledge in each of the three educational areas and by a comparison of the project group to a control group. Eleven of the 20 original participants, including one female, completed the program. All of the completers showed substantial gains in the academic skills of reading and mathematics, in occupational skills and knowledge, and in maturity of self-concept. As a result of the project, the following recommendations were made: (1) steps should be taken to make project participants aware of their status in the project and to help them personalize project goals; (2) performance-based assessment and counseling should be used to match trainees' aptitudes to long-term training requirements; (3) dedicated personnel should be employed; (4) the project director should supervise all staff, an advisory committee should be involved in long-term training, and regular staff meetings should be held with CETA representatives; and (5) participant placement should be made by program agents and Job Service personnel. (Author/KC)

ED226201

Final Report

EMPLOYMENT THROUGH LIFELONG LEARNING

A project demonstrating long-term simultaneous training in academic, vocational, and self-awareness skills.

Spoon River College
Canton, Illinois

Project Operation Dates:
January 1, 1980 to September 30, 1980

Report Submitted On
November 15, 1980

Gary J. Conti
Project Director
Director of Continuing Education

Wayne E. Giles
Vice-President of
Instructional Services

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This project was conducted with funds provided by the DCCA under the CETA of 1978, as Amended, and does not necessarily represent, in whole or in part, the viewpoints of the DCCA.

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ACKNOWLEDGEMENTS

The administrative staff expresses its appreciation to the Spoon River College Board of Trustees for its support of CETA related projects as part of its broad community college commitment of providing educational opportunities for the attainment of academic and personal excellence by all segments of the district's population.

This project and its potential for future successes are dedicated posthumously to board member, Carl Barthelemy, whose warmth, spirit, and enthusiasm spearheaded Board support for the college's linkage with CETA agencies and who provided personal encouragement to administrative staff members to continue special projects of this nature.

The Subgrantee's Executive Director and the Project Director was Dr. Gary J. Conti, Director of Continuing Education.

ABSTRACT

This project, which was funded by the Department of Commerce and Community Affairs and conducted by Spoon River College, demonstrated the feasibility of a theoretical model which had been developed by Giles and Conti and which proposed the interfacing of long-term simultaneous training in academic skills, vocational skills, and self-awareness skills for CETA clients. This project actuated the model by providing 32 weeks of training in developmental studies, welding, and human potential development to 20 CETA participants. Half of these participants were supported by the project, and half were supported by the local program agents.

The success of the project was measured by the gains in skills and knowledges in each of the three educational areas and by a comparison of the project group to a control group. Eleven of the 20 original participants completed the program. One completer was a female. All of the completers showed substantial gains in the academic skills of reading and mathematics, in occupational skills and knowledge, and in maturity of self-concept.

Several recommendations have been made as a result of the experiences of this project. Briefly, they are that:

1. *Additional long-term training projects be designed which simultaneously link training elements in academic, vocational, and self-awareness skills.*
2. *Conscious steps be continuously taken by project staff to keep the participants aware of their status in the project and to help them internalize and personalize the project goals.*

3. *Performance based assessment and extensive counseling be utilized to better match and clarify a trainee's interests and aptitudes to long-term training requirements.*
4. *Only personnel who have a strong commitment to working with students with the special needs demonstrated by many CETA clients be employed for CETA training projects.*
5. *Projects be internally organized in a fashion which provides for all personal responsibilities for project related activities to report directly to the Project Director for those activities.*
6. *Long-term training project designs contain provisions for regular project staff meetings and for CETA representation at these meetings.*
7. *Participant placement be a function of the local program agents and of Job Service.*
8. *Advisory committees be actively involved in long-term training projects.*

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INTRODUCTION

Between January and August of 1980, Spoon River College (SRC) conducted a special project, which was funded by the Department of Commerce and Community Affairs (DCCA), to implement a model for interfacing vocational training and literacy education. The classroom experiences for the CETA eligible clients consisted of simultaneous vocational training as a combination welder, developmental studies education in adult basic education, and human potential training. The major purpose of this project was to test the feasibility of providing extensive training in these three areas to CETA clients in order to graduate productive citizens who would be equipped with lifelong learning skills in the learning process, in careers, and in self-awareness. This final report for the project focuses on the design of the project, successes and problems experienced in conducting the project, and conclusions derived from the empirical and perceptual data. Finally, recommendations are suggested for more efficiently replicating the lifelong learning model tested in this project.

HISTORICAL BACKGROUND

Spoon River College (SRC) is a public comprehensive community college dedicated to delivering quality post-secondary occupational, transfer, adult, and developmental educational programs. Although many view these as isolated areas, modernity mandates their integration. Current demands for lifelong learning and economic stability require individuals with adequacy in both liberal and vocational education skills.

SRC supports the community college philosophy that assumes that all learners are entitled to educational opportunities that will facilitate the achievement of individual excellence. This commitment has guided the college in the planning and delivery of programs for the economically and educationally disadvantaged. In the past, however, too many educational programs at SRC and other educational institutions which were designed to ameliorate the plight of the disadvantaged have only included an occupational training component. While such training may prepare an individual for an entry level job, it does not provide the needed skills for dealing with inevitable change.

As a result of the lack of comprehensive combined literacy and vocational training, the number of adults in Illinois without a high school level education, of public aid recipients, and of unemployed youth, is high. Unfortunately, SRC primary service region of Fulton County ranks above the state average in these dismal educational, public assistance, and unemployment statistics.

In its attempt to fulfill its comprehensive community college commitment, SRC has provided educational and support services for the district's educationally and economically disadvantaged since 1974. It has a well established adult basic education program. Recently the college has undertaken a wide variety of projects

with the local CETA program agents and with state agencies to expand the provisions of these services. This is one such project. In April of 1979, SRC responded to a call for concept papers from the Governor's Office of Manpower and Human Development (presently the Department of Commerce and Community Affairs) and suggested the need for a demonstration project to implement the interfacing of vocational training and literacy education. After this concept was accepted by DCCA, SRC developed a detailed proposal entitled Employment Through Lifelong Learning. In September of 1979, this project was funded with training to commence the following January.

PLANNING

The Employment Through Lifelong Learning (ETLL) project intended to demonstrate that training programs which combined comprehensive vocational and literacy education components would graduate trainees with occupational skills and knowledges above those required for entry level positions, with a fundamental knowledge of the learning process and of the process for dealing with change, and with a strong self-concept and understanding of other people's values. It further intended to demonstrate that CETA eligible clients are a target group which can benefit from this type of training.

SRC intended to implement this program by providing 32 weeks of simultaneous vocational training as a combination welder and developmental training in adult basic education. The glue to cement these components together was additional human potential training. The program called for 480 hours of training in all areas of welding, 256 hours of literacy education, and 64 hours of self-awareness development.

The training group was to consist of 20 participants. Ten of the trainees were to be funded by DCCA, and ten were to be funded by local program agents.

Because DCCA was funding the project from monies in the Governor's Yough Program, at least 10 of the trainees for the project had to be between the ages of 18 and 21 and lack a high school education or equivalency. Referrals over 21 years of age had either to lack a high school education or equivalency or to demonstrate a need of basic developmental education by scoring below the 10.0 level on the Stanford Achievement Test. While all the college agreed to accept all referrals to the program from the program agent and to assume responsibility for the classroom training, the local program agent agreed to screen, provide intake service, and refer eligible clients to the program.

Upon the completion of the training, SRC agreed to cooperate with the program agent in locating job placement sites for the program participants. To assist in this placement and to provide lay guidance to the training, it was proposed that a welding advisory committee be established. In addition, the local program agent agreed to continue allowances for up to eight weeks for any program participant who was unable to find immediate employment at the end of the project, and to place them with an area employer for actual world-of-work experiences.

The implementation of this project involved the recruiting of participants by the local program agents, training provided by the college, and joint counseling and cooperation by the Region 5 Fulton County Outreach Director and college staff to keep the project running smoothly. All recruiting and screening for CETA eligibility were conducted by the Region 5 and Region 11 program agents. Twenty participants were recommended to the project by the program agents and were accepted as previously agreed upon by SRC. Ten of the trainees who were between the ages of 18 and 21, and lacked a high school diploma were designated as DCCA project participants and were totally funded by DCCA funds. Ten others met the overall project criteria, participated in the training, and were funded by the local program agents. Thus, although DCCA funded only 10 trainees for this pro-

ject, a total of 29 participated in the project.

The project sought to demonstrate that CETA eligible clients are capable of completing long-term training which has value to them because it contains comprehensive training in both literacy and vocational skills. The vocational training was to consist of welding training in the areas of electric arc, oxyacetylene, metallic inert gas, tungsten inert gas, and innershield. Arc-air cutting was also included. Upon the recommendation of the welding advisory committee, blueprint reading was added. The literacy training was to consist of individualized instruction in the academic skills areas of reading, writing, and mathematics. The training in the area of human relations skills and pre-employment skills was to consist of small group instruction in a values clarification class limited to project participants.

The planned 32 weeks of training were conducted between January 14, 1980 and August 21, 1980. Although the plan called for 15 hours per week of training in welding, scheduling difficulties only permitted 14 hours of welding per week. Therefore, nine hours per week of education in developmental studies was scheduled instead of the planned eight hours per week. The two hours per week of human development training was scheduled as planned. Thus, throughout the overall project, the planned 25 hours per week of total training was maintained.

A welding advisory committee (WAC) was established as proposed. The WAC met during the beginning stages of the project. The committee contained the college's previously established welding advisory council, representatives from several local businesses and industries employing welders, local job service representatives, and local CETA program agent officials. At the first meeting, the laymen emphasized the importance and current popularity of MIG welding by almost all area industries. They, therefore, recommended that future meetings be postponed until after the trainees had learned to MIG weld and representatives

from the WAC had had a chance to observe the trainees performing MIG welding in the laboratory. As a result of their decision, the WAC did not meet regularly. Instead, it met only one more time and that was near the end of the project.

A clerical assistant was not included in the original program design. However, the requirements of the IMIS system, of necessary reports, and of the need for providing clerical related assistance to the trainees for time sheets, forms, and payments quickly demonstrated the need for clerical assistance. The project was, therefore, amended to provide for one clerical aide for project related activities.

EVALUATION DESIGN

The evaluation work plan for the project called for the maintenance of process logs by the welding, academic skills, and human potential instructors, for quasi-experimental design to assess growth in pre-employment, self-awareness, and literacy skills, and for a follow-up on project trainees. The process evaluation logs were to contain information related to the selection of the participants, the nature of the training in the three component areas, the placement of the trainees at the end of the project, and the activities of the project advisory committees. The quasi-experimental design called for selecting the participants for the project, selecting a similar group of CETA eligible clients for a comparison group, and constructing and administering an instrument to compare these groups by means of pre and post tests on occupational skills, level of academic achievement, employment skills, and self-concept. The follow-up called for contacting both the trainees of the project and area employers to ascertain the employment rate, degree os success on the job, and employee/employer attitudes of the trainees.

Several forms of instrumentation were used to measure learning and behavorial

changes in this training. In the academic skills area, those students lacking a GED were administered the reading comprehension and the math computation sections of the Stanford Achievement Test, Form X. Those who were supported by the local program agents and had a high school diploma or equivalency were given the complete Stanford Diagnostic Reading Test, Form A. In the area of welding, all of the trainees lacked welding skills at the commencement of the project, and the level of mastery of welding skills by the termination of the program was measured by each trainee's performance on the standardized American Welding Society Welding Qualification Test, number D10-77. In the areas of personal development and of achievement in pre-employment skills, pre and post test scores were gathered on the Personal Orientation Inventory and on the CETA Star Series Assessment and Evaluation Instrument.

For the quasi-experimental design, a short ten item instrument was developed. This instrument was entitled the Employment Through Lifelong Learning Data Sheet. It contained items related to each individual's present level of education, training, and pre-employment knowledge and to one's perception of his/her level of skills, chance for employability, and self-concept.

IMPLEMENTATION OF EVALUATION DESIGN

The evaluation design was implemented by requiring the training instructors to maintain and submit monthly process logs and by securing the assistance of the local program agent in identifying a comparison group for the quasi-experimental design. Each of the three major instructors in the project were required to maintain a register log of their classroom activities, content areas covered, materials used, and progress of students. Although the part-time instructor for self-awareness skills was able to completely understand this requirement and was able to submit complete and timely reports, the full-time welding instructor and academic

skills instructor expressed confusion over the details of this requirement and demonstrated resistance to submitting comprehensive and timely logs. Because of this difficulty, the technical assistance of the DCCA project evaluator, Mike Walwer, was requested by the project director. Mr. Walwer met with the project staff and explained in detail the rationale and procedure for keeping logs. After that time, more comprehensive logs were submitted by the academic skills instructor. However, through the project the logs submitted by the welding instructor continued to be late, unorganized, and lacking in detail, sequence, and educational goals.

In May, the academic and contract year ended at SRC. At that time, the Project Director recommended to college's Vice President for Instruction that the human potential instructor continue to be involved in the project because of his excellent performance in the project. Despite the reservations voiced by the Project Director, the welding instructor was also retained in the project. Because the academic skills instructor had been employed by the college on a one-year terminal contract during the leave of a regular instructor, she was replaced in the project by a part-time instructor.

The new part-time academic skills instructor was briefed on the project and on the procedure for maintaining and submitting logs. During the months of June, July and August, she submitted timely logs which detailed the progress and present status of each trainee.

Although they were not included in either the project design, bi-weekly meetings were established to facilitate communication among the various instructional areas, the administration, and the CETA program agent. It was the consensus of the project staff that these meetings were necessary in order for the program to impact upon the trainees as a coordinated whole rather than in isolated parts. These meetings also sought to break down the barriers which existed internally

within the SRC from the welding instructor reporting organizationally to the Director of Occupational Education and the rest of the project staff to the Director of Continuing Education, who also served as the Project Director. These meetings provided a forum for identifying existing and potential problems and an organized setting for addressing problems related to the project or its trainees. In addition, the meetings provided a common place for the local program agent representatives to meet with the training staff.

The quasi-experimental design was implemented with the assistance of the Region 5 Program Agent and the Project LINK Coordinator who monitored all CETA related activities at SRC. After the Project Director had designed a short 10 item instrument, the training coordinator for the program agent and the LINK coordinator identified a sample group of CETA clients which had similar characteristics to the trainees in the project. The survey instrument was administered to both groups.

Two major problems developed during the project that influenced progress towards the overall project goal. One problem concerned attendance. Although all of the participants demonstrated an initial high level of motivation for training, the rate of trainee class attendance rapidly became a major concern of the project staff and the local program agents. Although the project director and human potential instructor argued that the best method for increasing the attendance rate was by addressing the sociological and psychological factors affecting the trainees, the welding instructor insisted on immediately establishing a rigid attendance policy for the project trainees. His rationale for this policy was that the industrial world imposes a similar code on its workers and that the trainees should immediately begin to conform to these types of rules and regulations. While this behavior modification approach neglected to consider the fact that the purpose of the project was to gradually train participants to move towards this behavior as

a final outcome of the project and failed to recognize that SRC is an educational institution, the policy of academic freedom within the college community allowed the welding instructor to implement this policy in his classroom regardless of the Project Director.

The second problem concerned placements. It was assumed by everyone involved with the project that successful completers of the project would be easily placed in welding positions with area employers. However, after the beginning of the project in January, the economy in Fulton County became severely depressed. The local economy had suffered severely during the last year as a result of the long strikes at Caterpillar Tractor Company and International Harvester Company, the major employers in the region. It suffered even more with the late winter closing of one of the three area coal mines. These conditions, coupled with the national recession, led to further economic instability in the county. By late August, unemployment in the county was extremely high, both Caterpillar Tractor Company, Illinois' largest single employer, and International Harvester Company were reducing their work forces, and available welding jobs for new employees had disappeared. As a result of reduced production at Caterpillar and International Harvester, production and the potential jobs at the local job shops also declined. To temporarily deal with the problem of placement, the local program agent made arrangements for four of the project participants to continue on the job training in a local job shop. The rate of placement will be reported to DCCA in the 60 and 90 day project follow-up studies.

PROJECT RESULTS

The major goal of this project was to demonstrate that CETA clients who have had negative school experiences are capable of persisting in and completing long-term comprehensive programs which combine academic skill and vocational training

and which contain an element for self-expression and self-concept building. To implement this project, ten CETA eligible youths who lacked a high school diploma and employable skills were recruited for this project. In addition, ten CETA eligible clients who either met the above criteria or who lacked employable skills and needed additional training in developmental skills were recruited, funded by the local program agents, and included in the project training. Of these 20 participants, 11 completed 32 weeks of comprehensive training. Five of these were in the group funded by DCCA, and six were in the group funded by the local program agents. One of the original four female participants completed the program. Four of the DCCA trainees and five of those funded by the local program agents successfully passed the American Welding Society Welding Qualification Test (AWS D10-77) administered as a final exit examination by the project welding instructor. Four of the five DCCA participants passed the GED exam during the project. One, however, still has to pass an examination on the state and federal constitutions before being issued her certificate. Each of the remaining DCCA participants measured a reading gain of over three years as a result of studies during the project. Two of the six program agent participants completed their GED's during the project, and one other has improved his reading level from 5.6 to 8.0. Three others had a high school equivalency at the beginning of the project. All of the participants who either had a high school equivalency or completed their GED during the program made extensive progress in developmental math during the project.

In the area of pre-employment and self-awareness skills, the eight participants who took the post tests showed improvement. Gains were recorded in the areas of decision making, of interests and capabilities as related to the job market, of job seeking, acquisition, and retention skills, of a feeling of sensitivity towards one's own needs and feelings, of self-regard, and of the ability to maturely accept anger or aggression.

The perceptions of the key actors in this project differed according to the basic educational philosophy with which they entered the project. The project director, self-awareness instructor, and Project LINK coordinator supported a humanistic philosophy. They favored a policy of identifying the major institutional, environmental, and personal barriers either actually or potentially inhibiting the CETA participants' success and of removing them. They also contended that the best training plan was to gradually move the classroom atmosphere from one of an educational setting at the beginning of the project to a training atmosphere which simulated actual industrial conditions at the end of the project. They felt that the careful and complete explanation to the participants of the rationale for each of these changes was a prerequisite to their acceptance and successful implementation. The part-time academic skills instructor added to the project in June also supported this approach.

The welding instructor, initial and full-time academic instructor, and the director of occupational education supported the behavioralist philosophy. They contended that a behavior modification approach should be used. Under this method, the atmosphere of the training environment would be totally and institutionally determined by the instructor, and the trainees would be required to conform to this environment. Those who refused to conform or who resisted by non-attendance were recommended for removal from the project.

Needless to say, these varying educational philosophies led to disagreement throughout the project on the best means of accomplishing the project's major goal. It also led to differing perceptions of the rate of progress and success of the project. In addition, it sparked internal administrative disagreement related to the staffing pattern for the project. It was generally felt by the humanists involved in the project that the project was very successful and that the participants

overcame significant personal and institutional barriers in obtaining comprehensive academic, vocational, and personal development skills. The behavioralists, on the other hand, were less impressed with the gains. They felt that some of the trainees still lacked the self-discipline for long term success in the world-of-work and that progress in the welding area would have been greater if the trainees had been more diligent in their class attendance.

Informal feedback from the project staff, Project LINK coordinator, and CETA representatives indicated that the participants had a very positive feeling towards the project and towards themselves for completing the project. Scores on the Personal Orientation Inventory support this feedback. The actions of two of the non-completers also reinforce this feedback. One of the non-completers was dropped from the project because he was incarcerated and, therefore, unable to complete the scheduled welding training. He personally contacted the human potential instructor and pleaded with him to develop a plan whereby he could complete the program. Another non-completer withdrew from the welding training and thereby from the project. However, she has continued to attend the academic skills class.

CONCLUSIONS

Several conclusions can be drawn as a result of this project. The most significant of these is that CETA participants are capable of completing long-term comprehensive training which simultaneously contains a basic skills, vocational skills, and values clarification element. Despite the fact that all of the participants had previous negative school experiences and had experienced recent frustrations in the job market, over half of the original starting group completed the 32 weeks of training. One of the female participants persisted in acquiring training in this non-traditional area and in passing the AWS Welding Qualification

Test which is required by employers before hiring a welder. In addition, 75% of the completers who lacked a high school equivalency at the beginning of the project successfully passed the GED examination. The two completers who had not yet passed the GED test, entered the program with very low reading scores, and both improved their reading level by over three years during the program. Finally, those who entered the project with a high school level education or completed the GED during the project made rapid and extensive progress in developmental mathematics. The project staff attributed this success to the participants' acceptance of individualized self-paced instruction and the emphasis on mathematics skills in the welding profession. Thus, the number of completers, the trainees' success on the final standardized welding test, and the participants' gains in academic skills support the conclusion that CETA clients are capable of overcoming barriers and of completing long-term training which contains the potential of developing basic academic skills and immediately marketable vocational skills.

A second conclusion that can be drawn from the project is that CETA clients are willing and able to persist in acquiring basic academic skills. Training programs often focus only on teaching trainees vocational skills. These programs overlook the fact that a high school level education is a fundamental job market requirement and that basic literacy is a prerequisite to the information gathering and information analysis skills needed by citizens in a modern society to successfully cope with change. This project provided a time line which was long enough to allow the participants to make significant progress in the acquisition of academic skills. As a result, all made substantial progress in developing their basic academic skills in the areas of reading, writing, and mathematics.

This conclusion related to basic academic skills is especially significant when compared to the consensus of opinion voiced by business leaders at a recent

conference in Arlington Heights, Illinois. At this Youth Employment Conference, which was jointly sponsored by the Illinois State Board of Education and the McDonald Corporation, the keynote speaker emphasized and business representatives echoed the theme that the most important things that schools can teach youth to help them get jobs are basic academic skills and basic human interaction skills. These representatives from businesses said that they could teach people who had these basic skills the technical skills that would be required to perform the job. However, if these basic skills were lacking, the businesses were unable to either employ or use the person. This candid admission by business representatives reinforces the contention that tomorrow's most employable people will be those who have lifelong learning skills and who can effectively communicate with their fellowman. Fortunately, this project demonstrates that when given enough time and a supportive atmosphere, CETA clients are capable and willing to persist in acquiring these skills.

A third conclusion is that values clarification element is necessary for long-term training projects. This class provided the participants with a chance to discuss personal and program concerns with impunity. It also offered an opportunity for the participants to bring forth grievances and seek group solutions to problems. Its open format allowed students to make reality checks to verify their perceptions. Finally, this class served as a catalyst for stimulating camaraderie among the training group. Thus, this element provided a laboratory for developing the communication, self-concept, and interpersonal relationship skills which were identified as being so important at the Youth Employment Conference.

A fourth conclusion is that attendance can be a problem requiring constant attention during a long-term training project. The experience of this project was that the lack of attendance was an especially acute problem during the middle

of the project. The application of a strict attendance policy had only a limited influence on increasing the rate of attendance. The intervention of the CETA county outreach coordinator in a counseling role with poor attendees proved beneficial in improving the rate of attendance.

A fifth conclusion is the number of completers in a long-term training program can be expected to be higher when selection criteria other than a potential participant expressed interest in the project is used. Other than age and academic skill level the only selection criteria for this program were interest and a verbal intent to complete the project. As a result, several of the original participants lost interest in the project when they discovered the nature of welding or the effort and time truely required to complete the training. One participant joined the Army within a week of starting the project. Those who lacked either a strong commitment to the project or the aptitudes for welding, dropped out of the project. This reflected negatively upon the completion rate of the project.

A sixth conclusion is that the administration of a long-term training project can be easier and the morale of the staff and participants can be higher when only staff who have a strong commitment to working with the special needs that are demonstrated by many CETA clients are employed on the project. The project could have operated more effectively and efficiently if the entire project staff had possessed a more positive feeling toward working with CETA clients.

A seventh conclusion is that the project administration can be more efficient when the entire project staff reports directly to the project director for activities related to the project. In this project, events in the area of welding were under the supervision of a director other than the project director. As a result of this and of academic freedom within the community college setting, the project director was not able to affect the changes he thought were necessary. Thus, administrative accountability can be increased by having all those responsible for project activities report directly to the project director for these activities.

An eighth conclusion is that long-term training projects will operate more efficiently when the local CETA representatives are actively involved in the project. The county coordinator for the local program agent assisted in recruiting and screening participants and participated in the bi-weekly staff meetings and in the advisory committee meeting. She also functioned as a counselor to the project participants. Her activities greatly facilitated open and constant communication among the college staff, CETA, and the participants. She also played a key role in defusing potential problems as they developed over the course of the project.

A ninth conclusion is that placement cannot be easily predicted for long-term training projects because of the current state flux of the national and local economics. When this project was originally conceived, the prospects for employment for all of its completers was high. However, between the funding of the project and the completion of the training, the local employment situation was drastically altered by the impact of strikes, inflation, a national recession, corporate relocation decisions, and state environmental protection laws prohibiting the burning of high sulfur coal. Since public educational agencies are not well suited for provided placement anyhow, it is concluded that placement can best be facilitated by the training agencies linking closely with the local CETA and Job Service Office for this function.

A tenth conclusion is that the efficiency of completing a long-term project can be affected by personnel changes during the project. These changes can have either a positive or a negative effect. Four personnel changes related to this project occurred at SRC during the nine months of this project. One change was positive because it led to the participants being exposed in the classroom to a teaching style that was more compatible with the general learning style of the

group. The other changes, however, were disruptive because they led to the loss of clerical support, the failure of the immediate post testing for the quasi-experimental design at the end of the project, and the loss of administrative direction to wrap-up the final stages of the project. While none of these personnel changes were related to the employees performance on this project and were voluntary, this project demonstrates that the outcome and efficiency of a project which covers a long span of time may be affected by the natural change of personnel within an organization.

RECOMMENDATIONS

The following recommendations are based upon the resulting successes and encountered problems from this demonstration project. First, and most importantly, it is recommended that future CETA programs consider linking simultaneous academic and vocational training, that this training be of a long enough duration to allow the participant to achieve mastery of the academic skills and of the vocational skills beyond the entry level, and that a self-awareness element be included in the training design. It is further recommended that whenever possible, the academic training be organized in individualized, self-paced modules. This instructional mode optimizes the allowance for individual differences and for mastery learning. This instructional approach was used in the SRC Developmental Skills laboratory, and all of the project completers made significant gains in reading and mathematics during the eight months of the project while utilizing this approach. In addition to the gains in the academic skills area, the participants showed a mastery of comprehensive welding skills and a better self-concept as a result of long-term training. Thus, the facts that over one-half of the participants completed the program and that high rates were achieved in academic

skills, vocational skills, and personal awareness, reinforce the utility of the training design proposed by this project.

Second, it is recommended that the project staff make a concerted and overt effort to keep the participants aware of their individual progress and to inform them of their status in relationship to the overall growth that can be expected by each participant during the project. This recommendation is directed at maintaining a steady and high rate of participant attendance in project training activities. This project demonstrated that participant motivation and classroom attendance was high at the beginning of the project when the trainees were excited about the prospects of the anticipated outcomes of the project. Near the end of the project when the attainment of these expected goals was within sight, classroom attendance once again increased. However, for much of the training, the participants experienced doldrums in their motivation, and attendance was a problem. The literature dealing with the participation of the economically disadvantaged in training programs indicates that irratic attendance patterns are the norm. This literature also indicates that this group achieves best when goals are immediately recognizable and applicable. Therefore, it is recommended that conscious efforts be made by the project staff to continuously break the broad project goals into operational parts, to meaningfully relate these parts to the participants, and to thereby capitalize throughout the project on the intrinsic motivation which the participants displayed at both the beginning and end of this project.

Third, it is recommended that performance based assessment and extensive counseling accompany recruitment into a long-term training project. Some of the participants selected to participate in the project because of the reputation associated with the high wages of welders and without a complete understanding of the aptitudes needed for welding, the nature of welding, or the time commitment required for comprehensive training. Performance based assessment can uncover the

interests and aptitudes for various occupational areas, and extensive counseling can clarify the requirements and benefits of long-term training. Together, they can help reduce the dropout rate of long-term training projects.

Fourth, it is recommended that only personnel who have a strong commitment to working with students with the special needs that are demonstrated by many CETA clients be employed for CETA training projects. The experience of this project demonstrated that staff who are committed to the goals and clientele of the project contribute more to the smooth operation of the project than staff members who are unsupportive of the goals or target population of the project.

Fifth, it is recommended that projects be organized within the educational institution so that all of those responsible for project activities report directly to the project director for these activities. Many educational agencies have separate administrative units for its academic skills and vocational skills training components. Therefore, any project which simultaneously links these units will draw teaching faculty for each unit. In order for the project director to be totally accountable for the project and to implement the necessary procedures for administering the project, he/she must have direct supervisory authority over those responsible for project activities.

Sixth, it is recommended that long-term training designs contain a provision for regular staff meetings which include local CETA representatives. The bi-weekly meeting during this project provided an excellent and necessary forum for facilitating common communication among all project staff. The involvement of CETA representatives kept the local program agent informed of the project activities and of areas of concern. The meetings also provided a means for immediately involving the county program agent coordinator in a counseling function with the participants.

Seventh, it is recommended that participant placement be a function of the local program agents and of Job Service. Educational agencies are not equipped with the personnel, contacts, or structure for adequate job placement. These are, on the other hand, fundamental activities of the program agents and of Job Service. Therefore, while the educational agency can assist in various ways, the primary responsibility for job placement should rest with those agencies which are best qualified and equipped for performing this function.

Finally, it is recommended that advisory committees be actively involved in long-term training projects. Unfortunately, the decision of the advisory committee for this project to postpone its second meeting until after MIG welding training had begun and the delay of MIG welding training until the latter part of the project reduced the number of meetings for the committee and the impact of the committee on the project. However, the committee proved very helpful in providing a lay evaluation of the progress of the vocational training and for suggesting training improvements in the welding area.

SUMMARY

This project sought to demonstrate that CETA clients are willing and able to persist in long-term comprehensive training which simultaneously contains elements in academic skills, vocational skills, and self-awareness skills. Despite the problems experienced from staffing, non-restrictive screening criteria, and the inefficient use of the advisory committee, over one-half of the participants completed the 32 weeks of training and showed substantial gains in reading and mathematic skills, in occupational knowledge and skill, and in self-concept developments. This project, which has a design that can be replicated in other occupational areas, has graduated students who have a positive self-concept, who have learned how tc learn, and who have occupational skills superior to those required for entry level into that career area.